

# WÄRTSILÄ PROPULSION CONTROLS UPGRADES

Maximise the reliability  
and lifespan of your  
controllable pitch  
propeller controls  
system



Read more at [www.wartsila.com](http://www.wartsila.com)



All vessels need a safe, reliable and easy-to-use control system for manoeuvring – but after years of use, the components of any system will deteriorate, spare parts consumption will increase and eventually parts will become obsolete. This can lead to unplanned maintenance, high operational costs and off-hire. Wärtsilä propulsion controls upgrades for controllable pitch propellers (CPPs) answer these challenges, and can vary from a standard retrofit with an in-cabinet solution to a fully customised retrofit solution.

### Technical concept

Contacts and capacitors will deteriorate over time depending on factors such as moisture, humidity, vibration and temperature. This will lead to rising operational costs resulting from investigation of failures, along with high spare-part costs. Spare parts for older systems will also eventually become obsolete and out of stock, meaning unscheduled repairs often take longer.

Wärtsilä's lifecycle strategy supports customers with solutions for spare parts, upgrades and full retrofits during the vessel's lifetime. Wärtsilä Propulsion controls upgrades for CPPs encompass a variety of services and upgrades based on the lifecycle stage

your vessel is in and consist of a three-stage approach:

1. Parts services
2. Midlife (in-cabinet) upgrades
3. Control system replacement

Initially, Wärtsilä maintains sufficient stocks of replacement components for the first 10 years of the product lifecycle.

As electronic components are always subject to obsolescence, Wärtsilä strives to offer direct replacements wherever possible and upgrade kits with the latest technology when required. Customers can at any point purchase a replacement control system with equivalent or customised functionality.

### KEY BENEFITS

- Offers full support for the entire CPP control system lifecycle
- Ensures reliable CPP control with trouble-free operation
- Ensures that the latest technology is used whenever possible
- Offers access to the same control system as for new builds
- Enables functionality add-ons during retrofitting, including adapting to e.g. changes to the vessel profile
- Enables improved fuel efficiency





CPP controls can be supplied for all CPP configurations. The control system fulfils the rules of classification societies and includes all functionalities required for safe, efficient and user-friendly operation of the vessel.

### **Scope of supply**

The scope of supply will depend on the kind of upgrade or service being offered, which in turn is based on the lifecycle stage. The upgrades range from standard equipment to fully customised options and are also compatible with third-party CPP control systems. Regardless of the generation of control system you are currently operating, we have a solution that fits.

An example scope is an in-cabinet solution where the original controllers and input/output are replaced by the latest hardware and technology; a second example scope is Wärtsilä Lipstronic/ReFit with a standard CPP control cabinet and the required control stations and functionality.

### **Additional feature**

An additional operational measure for CPPs is to add a “combinator curve” mode that adjusts the engine rpm according to the power consumption of the propeller. This makes it possible to operate the propulsion system with optimum efficiency.

### **Impressive fuel savings for the MV Henrike**

Wärtsilä installed CPP blades and a new control system with a combinator curve mode on the general cargo ship MV Henrike, cutting the vessel's

fuel consumption by an impressive 800 litres a day. The upgrade also led to quieter operation and decreased vibration, resulting in smoother voyages and less disruption to the underwater environment.

### **Why choose Wärtsilä?**

Wärtsilä is a leading supplier to the marine industry with a global service and support network. Wärtsilä supports its customers throughout the entire lifecycle of the supplied equipment and strives to maximise the useable life of customers' equipment investments.



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